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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,340	05/09/2001	Barry Bronson	10006196-1	3032

7590 11/01/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	PAPER NUMBER
2677	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,340

Applicant(s)

BRONSON, BARRY

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 8/10/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 1-15 and 20-26 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmut (JP 09-220200) in view of Ketrenos (US 6,788,311).

Regarding claim 1, Hartmut discloses in fig. 2, a method of displaying frames of images comprising generating an inner region display signal (17); generating an outer region display signal (18) of the frame of the image; and generating an outer region display signal of the frame of the image (see fig. 2, see 0013) displaying an outer region of the frame of the image on the displaying using the outer region display signal, wherein the outer region is of substantially lower resolution than the inner region (see 0013).

However, Hartmut does not disclose determining at least a color characteristic from the inner region display signal; and an outer region display signal of the frame of the image using a color characteristic.

Ketrenos discloses in fig. 4A, a color characteristic (see col. 4, lines 18-26) from the inner region (46A) display signal; and an outer region (44A) display signal of the frame of the image using a color characteristic (see col. 3, lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a color characteristic from the inner region display signal; and an outer region display of the frame of the image using a color characteristic as taught by Ketrenos into the system of Hartmut because the color character would provide high resolution computer display, and can display bright red pixels to bright white pixels of the system.

Regarding claim 2, Hartmut discloses generating an outer region display signal further comprises adjusting (see central beam adjusts, see 0004) the outer region display signal so that the outer region of the frame of the image blends with the inner region of the frame of the image (see abstract, see 0022).

Regarding claims 8, 22, 23, Hartmut discloses in fig. 2, a display comprising a plurality of pixels, the display having an inner region and an outer region of substantially lower resolution than the inner region; and a controller (3, see abstract) operable coupled to the display, wherein the controller generates an inner region of substantially lower resolution than the inner region display signal, and an outer region display signal using at least a brightness as discussed above.

Regarding claim 20, Hartmut discloses the wearable display comprising determining an amount of distortion for image signal data (see high and low resolution, see 0008), the distortion acting to distort a source image conveyed by the image signal data so that a field of view of view of the source image is expanded (see the resolution of the non-gazing field is higher than the center of a gaze field (see 0008); adjusting the image signal data (see 0004) so that source image

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conveyed by the image signal data is distorted to determine amount of distortion; generating a display signal using the adjusted image signal data; and displaying a distorted image on a display by using the display signal.

Regarding claims 3-4, 9-10, 12, 14 and 21, Hartmut discloses a method of displaying frames images display device as discussed above, However, Hartmut does not disclose the outer region of less than 5 cycles per degree resolution, or the inner region of at least 15 cycle per degree resolution, and ratio between an inner region and an edge of the source image of between 2:1 and 20:1, or the outer region of the frame of the image further comprises illuminating an array of red, blue and green lights, or an array of white lights.

It would have been obvious to one of ordinary skill in the art at the time the invention to have an outer region of less than 5 cycles per degree resolution, or the inner region of at least 15 cycle per degree resolution, and ratio between an inner region and an edge of the source image of between 2:1 and 20:1 as claimed since such a modification would have involved a mere change in range/shape of the levels. A change in range/shape is generally recognized as being within the level of ordinary skill in the art.

See In re Rose, 105 USPQ (CCPA 1995) and

See In re Reven, 156 USPQ 679 (CCPA 1968).

Regarding claims 5-7, 11-12, 24-25, Hartmut does not disclose the outer region of the frame of the image comprises illuminating an array of red, blue and green lights, or an array of white lights. Ketrenos discloses the outer region of the frame of the image comprises

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illuminating an array of red and white light (see col. 4, lines 23-25) and can have an inherent array of green and blue lights.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of the outer region of the frame of the image further comprises illuminating an array of red, blue and green lights, or an array of white lights as taught by Ketrenos into the system of Hartmut because this would provide the color saturation levels automatically adjusted based on the distortion from converting to interlace display of the system.

Regarding claim 26, Hartmut discloses the display device is a wearable display device. (see fig.1).

Response To Arguments

3. Applicant's arguments with respect to claims 1-15 and 20-26 filed on 8/10/05 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698.

The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
October 20, 2005

**AMR A. AWAD
PRIMARY EXAMINER**

